

C L A I M S

1. Device (1) for assembling a shield (10) containing at least one hole onto a tank, comprising :

- a) a base (2) intended to be firmly attached to the wall (9) of the tank,
- 5 b) a head (4) used for fixing the shield (10), this head (4) comprising a groove (3) whose upper (3'') and lower (3') lateral surfaces intersect an axis of the device (1) substantially normal to the wall (9) of the tank, the edge of the hole in the shield (10) being slipped into the groove (3),
- c) a non-return stub (5) which emerges from the outer surface of the device (1)
- 10 and prevents the detachment of the shield (10) from the tank.

2. Device (1) according to Claim 1, wherein the head (4) furthermore comprises an orifice (15)

3. Device (1) according to any one of the preceding claims, characterized in that it is made from at least one thermoplastic material.

15 4. Device (1) according to any one of the preceding claims, characterized in that it comprises at least two parts.

5. Device (1) according to the preceding claim, characterized in that one part is made of high density polyethylene (HDPE) and the other part is made of polyamide (PA).

20 6. Shield (10) intended for a device (1) according to any one of the preceding claims, such that the shield (10) has at least one hole whose contour exhibits a narrowing delimiting in the hole two parts (7) and (8) having different areas.

7. Shield (10) according to the preceding claim, such that the hole (10) is provided with a non-return stop.

25 8. Method of assembling a shield (10) according to Claim 6 or 7 onto a tank making use of at least one device (1) according to any one of Claims 1 to 5, according to which :

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- a) the base (2) of each device (1) is firmly attached to the wall (9) of the tank,
- b) the shield (10) is positioned with respect to the tank in such a way as to make each device (1) on the tank correspond with a hole in the shield (10),
- c) the shield (10) is fixed to the tank by a two-stage movement : firstly by displacing the shield (10) in a direction normal to the wall (9) of the tank and making the head (4) of each device (1) pass through the biggest (8) of the two parts of the hole which corresponds to it, in such a way that the groove (3) of each device (1) cooperates with the edge defined by the biggest part (8) of the hole and then by sliding the shield (10) in a direction parallel with the wall (9) of the tank in such a way that the head (4) of each device (1) becomes lodged in the part (7) of the hole whose section is the smallest,
- d) the non-return stub (5) comes to bear in a non-permanent manner against the edge of the hole in its part with the biggest section (8) in such a way that the groove (3) of each device (1) does not become detached from the edge defined by the smallest part (7) of the hole.

9. Method of assembling according the preceding claim, according to which the base (2) of each device (1) is firmly attached to the wall (9) of the tank by welding.

10. Fuel tank for motor vehicles comprising at least one device (1) according to any one of Claims 1 to 5 or a shield (10) according to either one of Claims 6 or 7 or a shield (10) assembled onto the tank by a method according to one of Claims 8 or 9.